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ABSTRACT

Action research begins with a question of interest to the researchers. Once the question is answered or progress is made toward answering it, action is taken. Data collected throughout the process are analyzed and conclusions are made. The process begins again with either a new question or a modification of the old question. Collaborative team action research involves teams of researchers including teachers, university researchers, and sometimes students. A major goal of action research is to help teachers and administrators develop professionally while university researchers keep abreast of current problems. Of specific interest in the research discussed here were teaching techniques used in grades six through eight, or middle level education. Research teams usually consisted of four content area teachers and a university collaborator; meetings were scheduled regularly for at least an hour. These settings were conducive to generating new strategies to initiate action, direct the research, solve problems, and answer the questions. Findings indicated that collaborative action research leads to continuous professional growth, improved classroom instruction, and student learning. (Contains 61 references.) (LH)

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Collaborative Team Action Research In The Middle Grades:

A Tool For Professional Development

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Collaborative Team Action Research In The Middle Grades:

A Tool For Professional Development

Action research is a methodology, a process of conducting research using a particular sequence of research techniques, strategies, and theoretical perspectives. The varieties of action research are as numerous as the topics addressed, but the umbrella of action research does have a few common characteristics. First, action research is qualitative in nature, interested in developing new insights concerning a matter of interest, or discovering new approaches to solve problems, rather than addressing particular hypotheses. Action researchers are interested in a deeper, richer understanding of the topic of their research. Second, the research begins with a question of interest to the researchers. The question can be general, but most often is specific and directs how the research will progress based on how the researchers might go about answering the question. The object of the research is to answer the question, or at least to work toward a laudable discernment of how the question might be answered. Therefore, the next step is to take "action" in an attempt to answer the research question. Data are collected throughout the process, preferably from a variety of sources and data collectors. Reflection is also an important part of the process, used periodically to better define and understand the progress of the research and to determine when the research question has been satisfactorily answered. Next, the data are analyzed and conclusions drawn, using qualitative techniques. Finally, reflection is used again to better define what was learned during the research process and to more fully understand its implications. A written report might follow. At this point the research often continues by beginning the process again, and starts with either a new question or a modification of the old question based on what was learned during the first research sequence. In this way action

research is an ongoing repetitive sequence, each completed series of research steps often referred to as a "cycle" of research, even though this term is a little misleading since the research never begins again at the same starting point, as a cycle might imply.

Our interest has been in collaborative action research. The addition of the word collaborative implies that two or more researchers are working together, exchanging ideas and expertise, interacting as they conduct action research in an effort to be more productive than if they worked alone. They meet together regularly to plan, conduct, reflect, and write about the action research they are conducting. The collaborative action research referred to in this study involves groups or teams of researchers usually including teachers, university researchers, school administrators, and sometimes even students. The research is classroom based and was a means by which the teachers could examine problems associated with their own practice. In addition, it helped the teachers initiate strategies and techniques to attempt solutions to the problems, and reflect on their results in an atmosphere that provided guidance and methodology. An important goal of this research was to help teachers and administrators develop professionally and allow a university researcher to learn more about adapting collaborative action research to a team setting, and to keep in touch with current problems and practical solutions in the classroom. Collaborative team action research therefore is defined for this study as a team of educators working together collaboratively in an effort to conduct action research.

Additionally, we have been interested in middle level education, specifically in effective teaching techniques and strategies used in grades six through eight. At this time of strong public concern throughout the nation over quality education, it is significant to note the continued and widespread positive interest in middle level education. Efforts to provide an appropriate

education of quality for early adolescents continue unabated with new middle schools springing up and efforts being made to implement the "middle school concept" (National Middle School Association, 1995) in existing middle schools. I believe that as middle schools continue to grow in popularity and develop educationally, collaborative team action research can be used to help answer questions that inevitably arise in an expanding field like middle level education. An important area of development in middle schools is the formation of teacher teams and the research reported in this study examined the use of collaborative action research by a middle school teaching team. This report represents our attempt to not only document the process of conducting collaborative team action research, but to explore the adaptation of collaborative team action research to professional development for middle grades teacher teams.

Meeting the Needs of Early Adolescents

The Institute for Educational Leadership (1986) stated that a first step toward improving our schools is increasing the professionalism of our teachers. Thoughtful practice is at the heart of teacher professionalism. A defining characteristic of the teaching profession is its use of strategy-based techniques to solve problems and facilitate decision making. As new and improved techniques and methodologies are developed, teachers must often change their understanding of what teaching is and how teachers teach. One attempt to better understand and improve teacher thinking in recent years has been the use of collaborative action research (McTaggart, 1991; Noffke & Zeichner, 1987; Carr & Kemmis, 1983). The next step in collaborative action research explored the concept of combining collaborative action research, used in examining teaching techniques and understandings, with group interactions, used to facilitate new ideas, reflect on understandings, and increase motivation.

The original concept of action research came from the work of Lewin (1947) in his study of "group dynamics" where a change or action, an attempt to solve a problem existing in the group, was introduced by the group facilitator and the results of the change were noted. An important aspect of this work was the fact that interaction among the group created new ideas that often accounted for the eventual solution to the problem or the "results" of the change. The interaction of the group and the facilitator was the basis of new ideas and their application.

Since the early twentieth century researchers have identified developmental characteristics of young adolescents, and educators have sought to structure schools, curriculum, and instruction to meet the needs of these middle level students. In spite of these efforts, the Task Force on Education of Young Adolescents of the Carnegie Council on Adolescent Development (1989) determined that we are still "failing" many of our young adolescent students. The Task Force concluded:

> Middle grades schools (junior high, intermediate, and middle schools) are potentially society's most powerful force to recapture millions of youth adrift, and help every young person thrive during early adolescence. A volatile mismatch exists between the organization and curriculum of middle grade schools and the intellectual and emotional needs of young adolescents. Caught in the vortex of changing demands, the engagement of many youth in learning diminishes, and their rates of alienation, substance abuse, absenteeism, and dropping out of school begin to rise (pp. 8-9).

Recent research supports the assertion that discrepancies may exist between the curriculum of middle grade schools and the intellectual needs of young adolescents (Anrig & Lapointe, 1989; Elliott, 1990).

The Role of Action Research

We believe a first step in closing the gap between curriculum and needs would include a change in the way middle grades teachers think about how pedagogy relates to students' needs. In almost every report of an action research project, claims were made about the value of action research in promoting changes in teacher thinking (Noffke & Zeichner, 1987). University researchers benefit as well; Duckworth (1986) emphasized that she always learned from teachers (in return) and saw the endless variations on how they used what they learned in their own teaching. Tikunoff et al. (1979) reported that every teacher interviewed noted in some fashion that the process of collaborative action research had caused professional growth, greater understanding of important issues, a higher and more powerful level of reflection, and a sharper attention to the complexities of classroom interaction. Henry (1986) quoted teachers from an Australian project, "Using action research in your teaching gives you a different outlook on teaching and yourself ... you move beyond thinking about content to be taught, to how children learn."

The above findings pointed researchers to ever expanding uses of action research as an effective methodology in educational research. During the decade of the 1980s, teacher educators received many suggestions related to the improvement of education. Suggestions ranged from restructuring existing schools (Goodlad, 1984) and increasing the variety of school curriculum (Goldberg & Harvey, 1983) to developing national standards for teachers (Carnegie Forum, 1986) and restructuring teacher education (Case, Lanier, & Miskel, 1986). An important variable in all of these suggestions was the role of the teacher. Even the best advice does not result in educational improvements unless teachers in the classrooms believe that recommendations can

make a difference and believe that they can successfully implement the changes (Harris, 1989). Crucial to the success of teaching is the teachers' sense of efficacy, their feeling that they can make a difference. Whether or not teachers believe in their own ability to make a difference in student achievement is related to the classroom environment and the learning that takes place in the classroom (Ashton & Webb, 1986). In addition, in order to improve the education of students it is essential that teachers implement and maintain a supportive environment that is conducive to student learning (Ashton & Webb, 1986; Carnegie Forum, 1986; Case, Lanier, & Miskel, 1986). It is in these areas of teacher implementation and efficacy that collaborative action research techniques are especially useful.

Current trends in some action research are even including students as researchers in their methodology (McLaughlin, Earle, Hall, Miller, & Wheeler, 1995) and noting their beneficial effects. We believe motivated teachers actively engaged in asking questions about their practice, collaboratively implementing actions, and reflecting on their results, are also creating better learning environments for their students. Much of what is involved in this research is directed toward the improved learning, higher motivation, and better socialization of the students and of teachers. For more than a decade, it has become more evident that teachers participating in collaborative action research become agents of their own change, and the results of their labor should be better educated kids (Oja & Pine, 1983). As a result, teachers can use action research to grow professionally, and to develop skills and competencies that empower them to solve problems and improve their educational practices, to the benefit of all. When we remove the mystical aura surrounding the practical application of teachers as researchers, they generally discover that not only is it something they can do, but also something they like to do and find

professionally and personally rewarding (Glesne, 1991).

In recent years action research has continued to become an ever expanding arena, including student mentoring (Powell & Mills, 1994), interdisciplinary teaching (Whinery & Faircloth, 1994), integrated curriculum (Burnaford, Beane, & Brodhagen, 1994), and has been used for a variety of purposes, such as learning more about how students learn (Allen, Michalove, & Shockley, 1993), understanding the cultural milieu of the classroom (Ballenger, 1992), examining innovative ways of teaching (Atwell, 1987), and teacher development (Oja & Pine, 1987; Mills & Pollak, 1993). This expanding body of evidence makes it clear that the process of action research does not simply inform teachers, but redefines how teachers gain knowledge and their relationship to knowledge generation in the field (Lytle & Cochran-Smith, 1991).

The last few years have seen the use of collaborative action research with middle grades educational teams (McLaughlin, 1993; McLaughlin & Allen, 1993; 1996; McLaughlin, Anderson, Bennet, Pratt, & Stripling, 1994; McLaughlin & Earle, 1994; McLaughlin, Earle, Hall, Miller, & Wheeler, 1995; McLaughlin & Stripling, 1995; Saurino, 1996; 1997), and most recently the application of collaborative team action research as a professional development tool (Saurino, Crawford, Cornelius, Dillard, French, McSwain, Murray, Saurino, Upton, & Walraven, 1996; Saurino, 1997) which is the subject of this report, and a discussion of the findings of the studies outlined in this paragraph follows.

The Research Team

The research teams in these studies consisted primarily of four content area teachers and a university collaborator. Some teams would add specialized teachers such as from special education, and school administrators would attend the group meetings even if only part of the

time. Meetings of the teams were scheduled regularly throughout the studies for periods of an hour or more, and an informal atmosphere was maintained. Collaboration has been used as a means of bridging the gap between the self-reliant, often isolated environment of the public school classroom and the publication-oriented environment of university research to provide both circles with needed information (Pine & Keane, 1986). The design of these studies was an attempt to foster this type of inter-relationship through the interactions of the teams in group settings. Collaborative action research exhibits a wide range of variation because there are many possible modes of action research and therefore many different ways in which action research can be theorized and practiced (Kosmidou & Usher, 1991). Therefore, different models of collaborative team action research were used, but the common element in all of the studies was teams meeting and interaction together in an effort to better understand and direct the research.

The teams meetings were where plans could be made, questions asked and answered, problems discussed, and reflections expressed. But it was the interactions of the team that were most valuable. The group setting was very conducive to the generation of new ideas, strategies, and techniques used to initiate actions, direct the research, solve problems, and ultimately answer the research questions. Collaborative action research per se is of little use if it does not accomplish a goal, and a major justification for educational research is the extent to which it helps transform educational practice in schools (Kemmis, 1984). If teachers, as a result of their involvement in action research, begin to reflect critically on their own professional actions and beliefs, then teacher research becomes teacher development. Through the process of self-conscious scrutiny, teachers can theorize their practice, revise their theories in light of reflective practice, and transform their practice into reflectively informed changes in their behavior (Carr &

Kemmis, 1983). An important goal of this reflection was to develop in the teachers, a rational understanding of their practice and how it applied to the transfer of knowledge to students. This increase in understanding was achieved through systematic reflection on both the unconscious and deliberate acts which constituted the process (Oberg, 1986). A major goal of this process was for the participants to understand this form of team inquiry, that is, how the reflective process increased teachers' awareness of their own practice and eventually their capacity to direct it more fruitfully.

Theoretical Undergirding

The concern qualitative researchers have for meaning is an important factor in the theoretical orientation of this approach. People use the word "theory" in many ways. Among qualitative researchers in education its use is sometimes restricted to a systematically stated and testable set of propositions about the empirical world. The use of theory in the studies of this report was much more in line with its use in sociology and anthropology and is more of a "perspective," what we think of as a loose collection of logically held together assumptions, concepts, or propositions that orient our thinking and research. When we refer to a "theoretical perspective," we are talking about a way of looking at the world, the assumptions we all have about what is important, and what makes the world work. The research in the teacher development studies was guided by a theoretical orientation which helps the data cohere, and enables the research to go beyond an aimless, unsystematic piling up of accounts. The theoretical perspective used in the studies was "symbolic interactionism" and was based on a broader theoretical perspective called "phenomenology" and we believe a brief discussion of this perspective is important.

Most other research approaches trace their roots to positivism and the great social theorist,

Auguste Comte. They emphasize facts and causes of behavior (Bogdan & Biklen, 1992). There are theoretical differences between qualitative approaches, even within single schools of thought (Gubrium, 1988), but most qualitative research reflects some sort of phenomenological perspective. Researchers in the phenomenological mode attempt to understand the meaning of events and interactions of ordinary people in particular situations. Phenomenologists do not assume they know what things mean to the people they are studying (Douglas, 1976). Phenomenological inquiry begins with "silence" (Psathas, 1973). This silence is an attempt to grasp what is being studied. What phenomenologists emphasize, then, is the subjective aspects of people's behavior. They attempt to gain entry into the conceptual world of their subjects (Geertz, 1973) in order to understand how and what meaning they construct around events in their daily lives. Phenomenologists believe that multiple ways of interpreting experiences are available to each of us through interacting with others, and that it is the meaning of our "experiences" that constitute reality (Greene, 1978).

Symbolic interactionism has been around for most of the last century, and Mead's (1934) discussion of the perspective from the standpoint of a social behaviorist is most cited. Blumer (1969) is most noted for integrating the various theories into a perspective emphasizing interaction, the present, our definition of our world, and how our interactive nature produces new meanings. Symbolic interactionism is compatible with the phenomenological perspective (Bogdan & Biklen, 1992), but is more specialized in attempting to understand the process of human interaction, especially the dynamics of group interaction. Symbolic interactionism narrows the scope of phenomenology by concentrating on the meanings, actions, and interpretations derived through social interaction.

From the symbolic interactionist's perspective, interpretation is not an autonomous act, nor is it determined by any particular force, human or otherwise. Individuals interpret through interaction and the construction of meaning. Groups sharing experiences, problems, and background often develop "shared perspectives" constituting "shared definitions," but these meanings are always subject to negotiation. When acting on the basis of a particular definition, participants may have problems, and these problems may cause them to develop new definitions.

Findings of the Studies

When the teacher is a lifelong learner, students are the beneficiaries. There is much administrators can do to ensure teacher renewal and growth through professional development. Since professional development competes with many other demands on teachers and administrators, it is important to know which of the available models of staff development ensure maximum professional growth. One such program is collaborative team action research. The research is conducted in cycles, which include (1) a period of planning, formation of research questions, and initial, baseline data collection, (2) the use of strategies or "actions" in an attempt to answer the research questions, (3) the collection of secondary data for comparison with the baseline data, and (4) reflection on where the data is leading, adjustments to research questions or methodology if necessary, and planning for the next cycle. Each team member keeps a journal throughout the process to record reflections, insights, data and new ideas.

The design of the collaborative team action research model lends itself to adult learning philosophies. Teachers are allowed to work in small groups or teams, thus reducing or eliminating their professional isolation. When possible, administrators are involved with teachers, not only to learn, but to build trust and become a member of the community of learners. Learning

occurs when beliefs and meanings are transformed as a result of interaction and communication with others (Rando and Menges, 1991; Cranton, 1994). Through critical reflection, adults examine the content, process, or premises on which meaning is based. Once identified and tested, previous assumptions may be modified. Behaviors based on the assumptions also become part of the discussion and change to reflect the modification. Cranton (1994) and Knowles (1984) assume all adult learners have a preference for being self-directed. Self-directedness, as described by Candy (1991), includes personal autonomy, the disposition toward thinking and acting autonomously in all situations; self-management, the willingness and capacity to conduct one's own education; learner control, the learner's decision making about objectives, sequences, strategies, and evaluation in an educational setting; and autodidaxy, learning on one's own from opportunities in the natural setting.

Effective professional development is a faculty-directed process that encourages the modification of behaviors based on critical self-reflection and evaluation of one's assumptions and beliefs about the targeted area of development (Licklider, 1997). Single-session activities have little effect on educator behavior. Effective staff development should include multiple sessions over an extended period of time (Sparks, 1983: Joyce and Showers, 1988: Butler, 1989). Transformative learning, self-directedness, and multiple sessions underlie the model of collaborative team action research.

Supporting the preference for self-directedness among adults, the model includes provisions to promote and take advantage of participants' predispositions for all aspects of self-directedness; thinking and acting independently; willingness and capacity to conduct their own education; decision making about goals, strategies, and evaluation of their own development; and pursuit of

learning in their own setting. Because adult learners need time to identify, challenge, and modify their beliefs and assumptions as well as their behaviors, the model provides regular sessions over a period of time to give participants ample opportunity to complete the processes of cognitive and behavior changes. Journal keeping and periodic rereading helps team members make sense out of what in the moment may seem a confusing array of complex interactions.

Professional development is a topic that could well dictate the success of schools in the twenty-first century. The vital role teacher development plays in building new knowledge and skills is well documented, but not often accepted by teachers and administrators who have spent endless hours enduring development experiences. The most common approach to teacher development, one shot lectures delivered to everyone in the school, are squeezed in after school or tucked into half-day sessions once a year. A better model of continuous professional growth would allow individual teachers to critically examine their own situations and discover ways in which to improve.

True professional development is a self-motivated, collegial, and voluntary process of learning relevant knowledge, skills, and attitudes. Collaborative team action research is a process that involves the identification of questions to be researched by the participants, the formation of a plan of "action" in which the participants attempt to answer questions, the collection of data in various forms to substantiate the effects of the action, and reflection upon the results of the action and the data collected. The cycle is then repeated, using the information gained to alter the questions to be researched. Professional development programs cannot succeed if they are something done to teachers, if teachers are passive recipients instead of active participants. Teachers need to be able to see that what they learn produces results in their classrooms and that

it enables them to improve the lives of students. Development programs where teachers are conducting school-based inquiry, evaluating programs, and studying their own practices with one another and with university-based colleagues to facilitate the program result in continuous professional growth.

The final phase of the research cycles was reflection. The teams reflected on the data related to their research questions, the direction the research was leading, possible questions for the next cycle of research, and finally how collaborative team action research had faired as a professional development course. Typical comments from the teams follow.

Dan: Could you reflect on changes in your teaching, or your thoughts about the research process as it relates to professional development?

Margaret: Basically I guess I changed my mind about the research process we were using. I really doubted the validity of what we were doing initially. Then I realized we were not out to impress anyone else but were here to answer questions for ourselves as a team. I learned that this is a valid process for a team. The team works together to investigate an area that concerns us. We became a team more aware of our students, of ourselves, and have become more unified. We took something we had already knocked around and zeroed in on it, looked at it like under a microscope. I think it has been a very worthy staff development project.

Cawood: I really believe that communication is the key to any team project and it has helped us this year having a unifying question to discuss. It has created an open forum for our team to express ideas and realize there are a lot of different opinions about things we have done. I think we have worked with these differences and become

closer as a team. I have learned about myself as a teacher and others as well.

Johnny: Over all this is the best thing I've ever done. We used to think we were teaming. I think we did a good job in the past but now we really know how to work together. This by far is the best thing I've ever done as far as actually being practical. Something I'll use and reuse. I'm embarrassed to say that in ten years this has been the first time I ever sat down with a student and said, "What do you think about what I'm doing." It is something I never thought to do before. Now even outside this project I ask, "How did that go? Did you like that? How can we change that?" It is like you have a customer and never asked what they wanted. I will look at children more as individuals now, and next year I will individualize more and try earlier to find out which buttons to push on different kids.

Russ: As staff development I thought it worked real well to open up communication channels between teachers. I think we, like students, will do more if we are interested in a subject too. It helps us remember what we learned.

Vicki: The communication between teachers and students has increased too. I feel that I learned a lot about my students.

Marilark: I've changed my mind about this type of research, at first I thought it was kind of hokey. Even though I really wanted to know the answer to these question, I thought this was kind of a goofy way of going about doing it. I changed my mind. I think this is the best way of going about finding answers because the only thing we are really concerned with is us and our situation.

Janet: The collaborative team action research model has been beneficial because it has

allowed me to answer a question that has relevance to my everyday teaching life without encumbering me with unnecessary requirements in how to go about it. This method has allowed me to gather data without absorbing a huge amount of time. Also, it has allowed me insight into student and teacher opinions and attitudes about research topic. Thirdly, I think this research will enable me to make better teaching decisions in the future.

The curriculum directors and other school administrators also took part in the research to varying degrees and comments after attending a reflection meeting are worthy of note.

Anne: I think the thing that affected me most was to see how well they learn from each other. The socialization of these teachers was great. Communication is such a crucial issue in the schools. In terms of staff development it is wonderful to listen to Johnny, it has raised some issues in his mind that are personally important and he is really doing individual learning. The training ground for his development is in his classroom and he has had to evaluate what is going on with the kids and what is going on with them personally. The reflection aspect of staff development is extremely important and one that is not often exercised by many staff development programs. I think this makes a great staff development (tool) because they have the theory, and they are actually putting it into practice.

Linda: It is professional development in its truest form. These teachers are beginning to look at things more deeply not only in terms of how it relates to their classroom but to the whole school. Staff development is to bring about change. Everyone of them, and I as well, are going to begin to change things because of this process.

Conclusions

The potential for collaborative team action research to enhance professional development, classroom instruction, and student learning is evident. The process of this model facilitates communication among teachers, administrators, and university personnel. It is a process that allows educators to take control of their own professional development. Teachers actively learning from experiences, making observations about processes that worked well, or didn't work, recording data, thoughts, feelings, attitudes, and decisions, and making inferences from their reflections brings about true professional growth.

Collaborative team action research leaves a school with people who know a research process, and it is cyclical so it can be continued. It can be one tool in an arsenal for professional development. It can be used with a significant percentage of teachers and although it takes more time than most currently used methods, it offers many benefits. More research is needed to fully understand the implications of this methodology as a professional development tool, but initial indications are that it will be an interesting and effective way for teachers, administrators, and university researchers to learn more about the expanding field of middle level education.

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